

Meeting: 1001, Evanston, Illinois, SS 6A, Special Session on Nonlinear Partial Differential Equations and Applications

1001-35-211 **Hong-Ming Yin*** (hyin@wsu.edu), Department of Mathematics, Washington State University, Pullman, WA 99164, and **Wei Wei**, Department of Mathematics, Guizhou University, Guiyang, Guizhou, Peoples Rep of China. *Global Solvability for a Nonlinear Maxwell's Equation in Quasistationary Electromagnetic Fields.*

In this paper we study a nonlinear Maxwell's system in quasi-stationary electromagnetic fields. We prove that under appropriate initial and boundary conditions the system has a global weak solution and the solution is also unique. This is a joint work with W. Wei. (Received August 26, 2004)